24. (New) The network of claim 11, wherein an acknowledgement message is received in response to the dynamic cost information packet, where the acknowledgement message indicates if an associated path should be used for broadcast to an identified network device.

25. (New) The network of claim 11, further comprising:

using an acknowledgement message that is first received to establish a preferred broadcast path to an identified network device.

26. (New) The network of claim 11, wherein the dynamic cost information packet includes cost that is updated periodically.

REMARKS/ARGUMENTS

In section 1 of the Office Action, the drawings were objected to as failing to comply with 37 C.F.R. 1.84(p)(5) because the reference signs of Figure 31 were not mentioned in the description, and that a proposed drawing correction, corrected drawing or amendment to the specification to add the reference sign(s) in the description are required in the reply to the Office Action.

Responsive to the objection in section 1 of the Office Action, Applicant is amending the specification as indicated above to mention the reference signs of Figure 1 in the description. Specifically, Applicant is amending the

paragraph beginning at page 137, line 20 in the description. No new matter is being added by the amendment to the specification. Accordingly, Applicant respectfully requests the withdrawal of the objection in section 1 of the Office Action.

In section 2 of the Office Action, the drawings were objected to because various reference signs in Figures 31 and 32 require descriptive wording.

Responsive to the objection in section 2 of the Office Action, Applicant notes that specification is being amended as indicated above to set forth the descriptive wording to items 3106, items 3100-3104, and items 3110-3134.

Responsive to the objection in section 2 of the Office Action, Applicant notes that the descriptive wording for items 3200, 3206-3208, 3212-3216, 3222, 3230, 3238, 3224, 3232, 3240, 3226, 3234, and 3242 are set forth from page 18, line 31 to page 22, line 28 of the specification as originally filed.

Accordingly, Applicant respectfully requests the withdrawal of the objections in section 2 of the Office Action.

In sections 3-8 of the Office Action, claims 1-20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Allon et al. (USP 5,539,883) in view of Grover (USP 4,956,835). Applicant respectfully traverses the rejection.

Allon is directed to a method of building a tree in a computer network, where each computer request another computer to become a parent computer from its list of "favoured parent" computer or by choosing a parent computer

randomly. A favoured parent has a lower rank than the current computer. A favoured parent will accept the request to be a parent computer if it can accept an additional child computer.

The Examiner also correctly states that Allon does not disclose forwarding broadcast messages according to a broadcast tree. In an attempt to overcome the deficiency of Allon, the Examiner relies on Grover in an attempt to show the pruning of a broadcast tree and forwarding messages according to the pruned broadcast tree.

Independent claim 1 distinguishes over the combination of Allon and Grover at least by reciting, a method including "*constructing a pruned broadcast tree by propagation of dynamic cost information packets*", and such recited features are not disclosed or suggested Allon and Grover, considered singly or in combination. As noted in page 11 of the specification, these claimed features beneficially permit the construction of a pruned broadcast tree without the need for a specialized protocol and an initialization sequence among the switches to construct the pruned broadcast tree.

It would not have been obvious to modify Allon with Grover because Allon teaches away from the features recited in claim 1 and from the combination suggested by the Examiner. In particular Allon discloses a current computer that requests and selects its parent computer based upon an ordered list of favoured parent computers, where the ordered list is stored in the current computer's configuration file. Allon does not disclose or suggest propagating information across the network to request and select a parent computer. Therefore, the modification of Fine, as suggested in the Office Action, is improper.

Furthermore, it would not have been obvious to modify Allon with Grover because the combination would require a substantial reconstruction and redesign of the elements disclosed in the primary reference. (See MPEP 2143.01). For example, there is no suggestion in the references on how to modify the elements in the Allon to perform the step of *"constructing a pruned broadcast tree by propagation of dynamic cost information packets"*. Furthermore, Allon and Grover do not suggest or disclose any interface circuitry, modules, systems, methods, and/or techniques that permit the elements disclosed in Allon to perform the step of *"constructing a pruned broadcast tree by propagation of dynamic cost information packets"*. Therefore, the modification of Allon, as suggested in the Office Action, is improper.

Accordingly, claim 1 is patentable over the combination of Allon and Grover.

Claims 2-10 depend from claim 1 and are patentable over the combination of Allon and Grover for at least the same reasons that claim 1 is patentable over the same combination.

Each of the claims 2-10 further distinguishes over the combination of Allon and Grover by reciting additional features.

Accordingly, each of the claims 2-10 is patentable over the combination of Allon and Grover.

Independent claim 11 is patentable over the combination of Allon and Grover at least for the same reasons that claim 1 is patentable over the same combination. Claim 11 distinguishes over the combination of Allon and Grover at

least by reciting, a network "*including a computer readable storage medium tangibly embodying a method operable within said network switch for managing a broadcast tree, said method comprising the steps of: constructing a pruned broadcast tree by propagation of dynamic cost information packets;*……", and such recited features are not disclosed or suggested by Allon and Grover, considered singly or in combination.

Accordingly, claim 11 is patentable over the combination of Allon and Grover.

Claims 12-20 depend from claim 11 and are patentable over the combination of Allon and Grover for at least the same reasons that claim 11 is patentable over the same combination.

Each of the claims 12-20 further distinguishes over the combination of Allon and Grover by reciting additional features.

Accordingly, each of the claims 12-20 is patentable over the combination of Allon and Grover.

For the above reasons, Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. §103.

New dependent claims 21-26 and 40 are being added and recite features that are not disclosed or suggested by Allon and Grover, considered singly or in combination. New dependent claims 21-23 depend from claim 1 and are patentable for at least the same reasons that claim 1 is patentable over the combination of Allon and Grover. Alternatively or additionally, claims 21-23 each recites additional features, and these features are neither

disclosed nor suggested by Allon and Grover, considered singly or in combination. New dependent claims 24-26 depend from claim 11 and are patentable for at least the same reasons that claim 11 is patentable over the combination of Allon and Grover. Alternatively or additionally, claims 24-26 each recites additional features, and these features are neither disclosed nor suggested by Allon and Grover, considered singly or in combination.

In summary, claim 1-26 are now pending in this application. This response amends claims 1 and 11, and adds new claims 21-26. For the above reasons, Applicant respectfully requests allowance of claims 1-26.

If the undersigned attorney has overlooked a teaching in any of the cited references that is relevant to the allowability of the claims, the Examiner is respectfully requested to specifically point out where such teachings may be found.

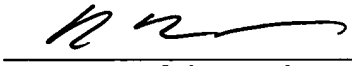
Attached hereto is a marked-up version of the changes made to the specification or claims by the current amendment. The attached page is captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE"**.

If the Examiner has any questions or needs any additional information, the Examiner is invited to telephone the undersigned attorney at (650) 842-0302.

Date: September 5, 2002

Respectfully submitted,

BALLARD C. BARE



By: Arnold M. de Guzman
Attorney for Applicant(s)
Reg. No. 39,955
650-842-0302
650-842-0304 (FAX)

Please send correspondence to:
IP Administration
Legal Department, M/S 35
HEWLETT-PACKARD COMPANY
P.O. Box 272400
Fort Collins, CO 80527-2400

CERTIFICATE OF MAILING			
I hereby certify that this correspondence, including the enclosures identified herein, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 C.F.R. 1.10.			
Signature:			
Typed or Printed Name:	Arnold M. de Guzman, Reg. No. 39,955	Dated:	**Sept. 5, 2002**
Express Mail Mailing Number (*optional*):			

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

Please amend the paragraph, beginning at page 1, line 11, as shown below:

--2. Related Patents

This patent is related to the following commonly owned patents: United States Patent Number ~~HPDN 10972154~~09/228,110 entitled *Load Balancing Switch Protocols*, United States Patent Number ~~HPDN 1097206~~09/228,159 entitled *Identity Negotiation Switch Protocols*, United States Patent Number ~~HPDN 1097206~~09/228,890 entitled *Cost Propagation Switch Protocols*, United States Patent Number ~~HPDN 1097206~~09/228,913 entitled *Cost Calculation in Load Balancing Switch Protocols*, United States Patent Number ~~HPDN 1097206~~09/228,918 entitled *MAC Address Learning and Propagation in Load Balancing Switch Protocols*, United States Patent Number ~~HPDN 1097206~~09/228,992 entitled *Path Recovery on Failure in Load Balancing Switch Protocols*, and United States Patent Number ~~HPDN 1097206~~09/228,169 entitled *Discovery of Unknown MAC Addresses Using Load Balancing Switch Protocols*, all of which are hereby incorporated by reference.--

Please amend the paragraph, beginning at page 137, line 20, as shown below:

--Figure 31 illustrates a situation where a non-load balance device 3106 interconnects multiple load balance domains 3100, 3102, and 3104. The load balance domains 3100, 3102, and 3104 includes switches 3110-3114, switches 3120-3124, and switches 3130-3134, respectively. From the switches' point of view this appears much like the case of a non-load balance device connecting multiple ports in the same load balancing domain.--

In the claims:

Please amend claims 1 and 11 as shown below:

1. (Amended) A method operable within a network switch for managing a broadcast tree, said method comprising the steps of:

constructing a pruned broadcast tree by propagation of dynamic cost information packets; and

forwarding received broadcast messages to other network devices in accordance with said pruned broadcast tree.

11. (Amended) A network switch including a computer readable storage medium tangibly embodying a method operable within said network switch for managing a broadcast tree, said method comprising the steps of:

constructing a pruned broadcast tree by propagation of dynamic cost information packets; and

forwarding received broadcast messages to other network devices in accordance with said pruned broadcast tree.

Please add new claims 21-26 as shown below:

21. (New) The method of claim 1, wherein an acknowledgement message is received in response to the dynamic cost information packet, where the acknowledgement message indicates if an associated path should be used for broadcast to an identified network device.

22. (New) The method of claim 1, further comprising:

using an acknowledgement message that is first received to establish a preferred broadcast path to an identified network device.

23. (New) The method of claim 1, wherein the dynamic cost information packet includes cost that is updated periodically.

24. (New) The network of claim 11, wherein an acknowledgement message is received in response to the dynamic cost information packet, where the acknowledgement message indicates if an associated path should be used for broadcast to an identified network device.

25. (New) The network of claim 11, further comprising:

using an acknowledgement message that is first received to establish a preferred broadcast path to an identified network device.

26. (New) The network of claim 11, wherein the dynamic cost information packet includes cost that is updated periodically.